

**DARPA-BAA-16-25 Program**  
**Frequently Asked Questions (FAQs)**  
**as of 03/11/16**

23Q: Is it a pre-requisite to submit the Abstract before the full proposal?

23A: Abstracts are not a prerequisite to full proposal submission. However, please read the BAA and the FAQ carefully. If you still feel that your research is within scope, you should submit a proposal.

22Q: The template uses larger fonts—as well as spacing—than specifically called out by the solicitation. For instance, the headings in the template are 13 pt font, and paragraphs have spacing before them that add white space for the reader. May I reduce all fonts that are larger than 12 points and eliminate white space? Or am I required to use the exact formatting provided in the template?

22A: You may reduce the provided template fonts to 12 pt and eliminate unnecessary white space. However, you must follow the template's structure (order, numbering, etc.) and complete the requested tables and slides.

21Q: The Slide 1 "Indirect Costs/Overhead" category requests the number to be shown "(as a percentage of direct labor)", but the cost proposal instructions indicate to show the total effort "cost". Please advise if the entry for indirect costs/overhead is to be shown as a percentage or as a dollar figure.

21A: This category should show Indirect Costs/Overhead as a percentage of direct labor. Please show this figure as a percentage. Additional cost details may be provided in Section iii of the cost proposal

20Q: Should I revise the Slide 1 categories of major cost items to include other requested categories mentioned in Section ii of the cost proposal such as subcontracts and consultants?

20A: Slide 1 requests a cost summary by category. Subcontractor costs should be broken into the appropriate category listed on the slide and included in the category totals. Consultants can be included in the most appropriate FTE category. Additional cost details may be provided in Section iii of the cost proposal.

19Q: Will proposals that focus on development of a specific technology but forego general modeling of photon detection be considered?

19A: A research path that narrowly focuses only on a particular detection technology is not of interest. Successful approaches must address the primary goal of Detect: to generate a new fundamental model of photon detection and to perform experiments that inform and validate that model.

18Q: Should detector development target quantum applications, classical applications, or both?

18A: The Detect Program will use quantum modeling to develop superior detectors for classical applications, such as using single-photon counters to improve photography.

Proposers should not propose to develop detectors whose primary use will be for quantum computing or quantum communications.

17Q: Will proposals that devote a large part of their research plan to ancillary technologies, such as exotic photon state creation or quantum information science, be considered?

17A: No. The primary focus of a proposal should be on establishing the fundamental limits of photon detection; ancillary technologies are of interest only if they directly contribute to this goal.

16Q: If a FFRDC is proposed as a subcontractor/teammate, will DARPA directly fund the FFRDC or will the funding for the FFRDC flow through the prime contract like any other subcontractor?

16A: It is up to the proposer to determine the teaming structure that makes the most sense based on the nature of the proposed work. The Government Contracting Officer will determine the appropriate award instrument and funding mechanism depending upon the nature of the work proposed, the required degree of interaction between parties, and other factors.

▲▲▲New Q/A▲▲▲

15Q: Would the development of an imaging detector in the THz or mmWave spectrum be of interest for this program, or is the focus limited to a shorter wavelength?

15A: Detect is a fundamental research program. Please see the BAA for more details.

14Q: How much emphasis in the proposal, if any, should be placed on the readout integrated circuit in terms of achieving these fundamental DETECT limits in a real world device?

14A: Detect is a fundamental research program. Please see the BAA for more details.

13Q: Do "dark counts" include background counts due to detected blackbody radiation?

13A: Yes.

12Q: In Phase I, to what extent do you want proofs of concept vs. system demonstrations? What about Phase II? Is a system/application connection of interest?

12A: Detect is a fundamental research program. Please see the BAA for more details.

11Q: Do you plan to fund teams of varying sizes, or do you have a specific team size in mind? What is the size of the typical team you envision?

11A: Teams must include the requisite expertise needed to achieve the proposed goals. Experience shows that basic research programs of this type require teams consisting of 3 to 5 investigators working collaboratively.

10Q: Are new concepts of interest even if there's limited preliminary work available?

10A: Yes.

9Q: Are single teams expected to work on multiple technologies, or is a single technology choice encouraged?

9A: Teams are required to choose a single focus technology.

8Q: Can you clarify to what extent the metrics have to be achieved simultaneously, or can be in different device designs, how different can the devices be? Can they be totally different, or tweaks within a device category?

8A: These issues are clearly described in sections I.C and I.D of the BAA.

7Q: Should we assume free-space coupling, or can we assume the photons are already in waveguides?

7A: The goal of Detect is to establish the physics-enforced limits of photon detection and to establish the fundamental trade-offs between the various metrics given in the BAA. Furthermore, the program seeks to develop detector designs for both free-space and guided-wave applications. Therefore, the proposers can assume either of the two scenarios.

6Q: Is there a preference regarding assumptions about the source timing, pulsed vs. CW?

6A: No. However, note that gated detection is equivalent to reduced detection efficiency.

5Q: Would spectral resolution be considered as a primary metric? Would QND detection (Quantum Non-demolition Detection) be considered a metric?

5A: The connection between temporal resolution and spectral resolution is generally understood. However, the primary metrics are defined in the BAA. Proposers can detail any additional metrics that help them make a compelling case for how they will achieve the primary metrics.

4Q: Please provide guidance for the spectral coverage associated with UV, Vis, and NIR.

4A: Detect is a fundamental research program. Please use generally accepted definitions for these spectral regions.

3Q: For a Federally funded laboratory, we need to show we are not competing against industry. Is having an industry or private company partner sufficient to be eligible?

3A: Procedures for proving eligibility for FFRDC's and Federally Funded Laboratories to receive funding are set forth in the BAA (Section III.A.1). Having an industry or private company partner is not, by itself, sufficient.

2Q: Are all results publishable?

2A: Yes.

1Q: Is international collaboration allowed?

1A: Yes, see Section III.A.2 of the BAA. This is subject to the laws and regulations of the U.S. Government.